

Page 11, paragraph encompassing lines 7-12:

A3 The individual lipid elements of the layered lipid bilayer of the cochleate precipitates can be any of the many known lipid structures having a negatively charged polar head group. Preferably the majority of the lipid elements of the lipid bilayer contain a negatively charged phospholipid headgroup. Upon contact with a lipid bilayer of a target cell, the layered lipid bilayer is capable of delivering one or more of the therapeutic nucleotide sequences and one or more AAV proteins to the interior of the target cell.

Page 18, paragraph encompassing lines 13-16:

A4 Macroscopically, the final formulations consisted of heavy white suspensions. Phase contrast, light microscopic observation (1000x) indicated heavy suspensions of refractile granular crystals, in both free and aggregate form. Cochleate structure of the crystals was confirmed by addition of EDTA, which caused conversion of the cochleate crystals to liposomes.

Page 18, paragraph encompassing lines 18-23:

AS Conditions to promote formation of DNA-binding protein complexes may vary but can be determined experimentally. Conditions used were TES buffer (100 mM NaCl, 2 mM TES, 2 mM histidine, pH 7.4) at approximately 2 times the volume of protein in the buffer it was purified in (HEPES buffered, pH 7.5, 150 mM KCl, 1 mM MgCl₂, 0.1 mM EDTA, and 10 mM maltose) using a ratio of DNA to lipid of 1.0:10.0 by weight. A probable range of useful ratios for formulations would be from 1:1 to 1:100 by weight.

PRELIMINARY AMENDMENT
Divisional of U.S. Appln. No. 09/210,578

Page 21, in the Table, first line as follows:

Neonatal cord blood CD34 ⁺ cells in 1 mg/ml G418	
Cochleate Type	Colonies/30 fields*
No Cochleates	20
CWRSVN Cochleates alone	23
CWRSVN Cochleates/Rep 68	26
CWRSVN Cochleates/Rep 78	27
CWRSVN Cochleates/Rep 68 and Rep 78	38

*mean of duplicate plates

Page 23, in the Table, last line as follows:

Neonatal cord blood CD34+ cells in 1.5 mg/ml G418		
	Colonies/30 Fields*	
Cochleate Type	Range	Mean
No cochleate	0	0
No cochleates/no G418	60-65	62
G1EN cochleate/Rep 68 & 78	0	0
CWRSVN cochleate alone	0-3	1.5 (sd 1.1)
G1EN retroviral vector**	1-2	1.4 (sd 0.2)
G1EN retroviral vector ***	16-26	18.3 (sd 5.4)
CWRSVN cochleate/Rep 68 & 78	2-8	5.25 (sd 2.2)

- * counted in quadruplicate plates
 ** standard MMLV retroviral vector expressing neo resistance
 *** transduced with cytokines for 3 days (standard retroviral transduction procedure)

IN THE CLAIMS:

Please cancel claims 1-88 without prejudice or disclaimer.

Please add the following new claims:

89. A composition comprising:

a) a vector delivery structure comprising:

1) a cochleate comprising a lipid bilayer element and cations;